

Department of Medical Genetics

June 3, 1957

Dr. Peter Mitchell Biochemistry Unit, Zoology Dept. West Mains Road, Edinburgh 9, Scotland

Dear Peter:

I hope you can forgive me for the inordinate delay in replying to your letter of April 8, especially when I had promised in advance to comply with it. I can only pleadesome atypical distractions from the work that had piled up, and in connection with this new department.

I don't have the strains of the ML series, but I can give you the comparable mutants of E. coli strain K-12, according to table 7 of the paper in the Dec. '56 Ann. Pasteur Inst. Accordingly, I am sending you the following:

K-12 Wild type Lac * ML30] Please keep in mind that both the permease and galactosidase of these strains, where W-2241 sè-called cryptic Lac * ML3 present, are inducible.

W-2441 received from Monod as 1301-1 and purportedly 'constitutive crymaic'

W-1317 Windton Galactosidase-constitutive = MI-308

W-327 Lac, Sum = maltose-positive, glucose hegative (cf.Doudoroff, Hassid, Putnam, Potter and Lederberg, 1949, JBC 171:921.)

I've not had much more to say about these strains since 1951 (CSH Symp. 16 and Genetics in the 20th Century. W-1317 was selected by means of neolactose). I will be interested to learn how far you concur with Monod's imputations.

You were most hospitable during our visit to Edinburgh, and especially generous in lending your shaver—which was one of the most comfortable I have ever used.

We have about 8 weeks now before leaving for Australia (for 3-4mos.) and I don't expect we'll get any more done with protoplasts or L-forms, except to write up what we have done so far. We have succeeded in isolating some genetically blocked L-type mutants in E. coli K-12; these have so far proved to be DAP-auxotrophs. I should think you might be interested in these creatures: Elizabeth Work could furnish you with Davis' strain, if you were; this one is perhaps better worked over than our new ones.

With best regarder

Yours sincerely,

Joshua Lederberg
Professor of Medical Genetics